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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,823	03/27/2001	Henry Kopf III	2780-183	9987

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INTELLECTUAL PROPERTY / TECHNOLOGY LAW
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EXAMINER

SAVAGE, MATTHEW O

ART UNIT PAPER NUMBER

1723

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,823

Applicant(s)

KOPF, HENRY

Examiner

Matthew O Savage

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any claimed patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-7, 10-13, 16 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 10-13, 16, and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, 10-13, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kopf '930 in view of Demmer et al and/or Karbachsch et al.

With respect to claim 1, Kopf discloses all of the details of claim 1 including thin gasket layers 600, G1, G2 (see FIGS. 17 and 18) positioned adjacent to the main top and bottom surfaces of the filtration cassette, wherein the thin gasket layer comprises an elastic material for forming a fluid tight seal between top and bottom surfaces of the filtration cassette and adjacent structure engaged therewith, and the gasket layer on each main top and bottom surfaces of the filtration cassette fully encapsulating top and bottom surfaces of the cassette with the exception of the inlet basin, outlet basin, and permeate passage openings of the filtration cassette. Kopf fails to specify the gasket as being bonded to the top and bottom surfaces of the cassette and bonded to and fully encapsulating the side surfaces of the cassette. Both Demmer et al (see FIG. 3, element 3) and Karbachsch et al (see FIG.2, element 90) disclose at least one thin gasket layer bonded and fully encapsulating all outer surfaces of the cassette except for inlet and outlet ports of the cassette (e.g., openings 50 shown in FIG. 3 of Demmer et al, and openings 50 shown in FIG. 1 of Karbachsch et al.), the thin gasket layer

comprising an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith. Demmer et al and Karbachsch et al suggest that such an arrangement facilitates assembly of the cassette with adjacent structure since the gasket is bonded to the cassette. It would have been obvious to have modified the cassette of Kopf so as to have included a thin gasket layer bonded to and fully encapsulating all outer surfaces of the cassette except for the inlet and outlet flow ports including the inlet basin, outlet basin, and permeate passage openings as suggested by Demmer et al and Karbachsch et al in order to facilitate assembly of the cassette with adjacent structure. Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application. Demmer et al and Karbachsch et al fail to specify the recited thickness values, however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

Concerning claim 3, both Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application.

Regarding claims 4-5, Demmer et al and Karbachsch et al fail to specify the recited thickness values, however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

Regarding claims 6-7, Demmer et al and Karbachsch et al fail to specify the recited temperature resistance ranges, however, such a modification would have been obvious in order to optimize the cassette for a particular application.

Concerning claims 10 and 11, Karbachsch et al disclose silicone (see line 13 of col. 6).

Regarding claims 12 and 13, Karbachsch et al disclose molding (see lines 8-18 of col. 8).

As to claim 16, Kopf discloses the recited ports.

With respect to claim 19, Kopf discloses all of the details of claim 19 including thin gasket layers positioned adjacent to main top and bottom surfaces of the filtration cassette, wherein the thin gasket layer comprises an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith, the gasket assembly fully encapsulating the filtration cassette, and the gasket layers encapsulating main top and bottom surfaces of the filtration cassette except for the inlet basin, outlet basin, and permeate passage openings. Both Demmer et al (see FIG. 3, element 3) and Karbachsch et al (see FIG.2, element 90) disclose at least one thin gasket layer bonded to the cassette, the thin gasket layer comprises an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith, the thin gasket layer fully encapsulating the filtration cassette with the exception to inlet and outlet ports to the cassette (e.g., openings 50 shown in FIG. 3 of Demmer et al, and openings 50 shown in FIG. 1 of Karbachsch et al.) Demmer et al and Karbachsch et al suggest that such an arrangement facilitates

assembly of the cassette with adjacent structure since the gasket is bonded to the cassette. It would have been obvious to have modified the cassette of Kopf so as to have included the gasket layers bonded and fully encapsulating all surfaces of the cassette with the exception of inlet and outlet ports to the cassette as suggested by Demmer et al and Karbachsch et al in order to facilitate assembly of the cassette with adjacent structure. Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application. Demmer et al and Karbachsch et al fail to specify the recited thickness values, however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

Applicant's arguments filed 11-13-03 have been fully considered but they are not persuasive.

Applicant argues that Demmer and Karbachsch fail to disclose a gasket that fully encapsulates all outer surfaces of the cassette, however, it is held that the references clearly suggest such a limitation since they disclose gaskets that cover all outer surfaces of the cassettes with the exception of open areas required to form inlet and outlet ports to the cassette. It is held that one skilled in the art, being aware of the gaskets disclosed by Kopf and Demmer, would modify the gaskets 600 disclosed by Kopf to be bonded to and to fully encapsulate all outer surfaces the cassette to facilitate assembly and sealing of the cassette to an adjacent plate type manifold structures.

Applicant argues that Demmer and Karbachsch fail to address misalignment issues, however, it is held that such a feature is inherent in the references since the sealing portions of the gasket on upper and lower surfaces of the respective cassettes are bonded to the cassette, and therefor cannot be misaligned with inlet and outlet ports areas of the cassette when clamped between the associated manifold structures.

Applicant argument that Kopf teaches away from providing an integral gasket is not considered persuasive since there is no express teaching in the reference to exclude an integral gasket structure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 6:00am-2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda W. Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1101.

M. Savage
Matthew O Savage
Primary Examiner
Art Unit 1723

mos
January 14, 2004